1.0 INTRODUCTION

1.1 PURPOSE, NEED, AND PROGRAM OBJECTIVES

The Program described in this Program Environmental Impact Report/Environmental Assessment (EIR/EA)[1] has, as its purpose, the final determination of the disposition of the shell mounds and remnant caissons that lie at the former sites of Chevron Platforms Hilda, Hazel, Hope, and Heidi (collectively called the 4H Platforms; Figures 1-1 and 1-2) on State Tidelands offshore Carpinteria, Santa Barbara County. The shell mounds are roughly semi-circular, approximately 25 to 28 feet high, and range from 180 to 266 feet wide; collectively, the four mounds contain approximately 45,000 cubic yards (cy) of a variety of materials (see Sections 1.4 and 1.5). The four caissons, remnants of Platform Hazel, are steel-jacketed concrete structures containing sand, cement, steel pipes, and steel cross-members. Each caisson is about 40 feet high, 27 feet in diameter, and almost entirely covered by shell mound materials (see Section 2.1.2.1).

In their current configuration, the shell mounds and Hazel caissons constitute a significant modification of the seafloor topography that precludes trawling at the former platform sites. As discussed in Appendix C, the shell mounds also contain quantities of contaminants, including metals, petroleum-derived hydrocarbons, and poly-chlorinated biphenyls (PCBs) that could pose potentially significant risks of toxicity to and bioaccumulation in marine organisms exposed to the contaminants (if contaminants leach from the mounds and/or if the mounds are disrupted). Removal of the shell mound materials could eliminate, in the long term, these risks; such removal could also, in the short-term, release such contaminants.

The need for the Program is based on: (1) existing obligations for Chevron, under its approved Abandonment Plan, to ensure that the areas previously occupied by the 4H Platforms are again accessible to commercial fishers; and (2) resolving concerns with potential adverse water quality and marine biological effects that could result from the shell mounds in their current configuration.

The Program's objective is to define, analyze, select and implement one or more actions described within seven identified Program Alternatives (see Sections 1.3 and 2.0 and Table 1-1) that address the disposition of the shell mounds and Hazel caissons with the least impact and greatest overall, long-term benefit to the environment. The Program ultimately selected and applied, either to individual or collective shell mound (and caisson) locations, will consist of actions drawn, wholly or in combination, from one or more Program Alternatives. The Program EIR/EA analysis is intended to identify and analyze the full range of potential significant impacts of each component action and thereby allow the consideration of any action or combination thereof at any location.

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1 Although this document is referred to as a Program EIR/EA, no formal co-lead agency relationship presently exists between a federal agency and the California State Lands Commission (CSLC), which is the lead agency under the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] section 21000 et seq.).

1.2 OBJECTIVES OF ENVIRONMENTAL REVIEW

This Program EIR/EA serves as an informational document for decision-makers and the public to use during the environmental review process. The State CEQA Guidelines section 15168(a) defines a Program EIR as "an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either: (1) Geographically, (2) As logical parts in the chain of contemplated actions, (3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or (4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways." Pursuant to the State CEQA Guidelines section 15168(c)(5), "With a good and detailed analysis of the program, many subsequent activities could be found to be within the scope of the project described in the program EIR, and no further environmental documents would be required."

The Program EIR/EA is intended to provide the information required by the CSLC, as the CEQA lead agency, and State responsible agencies to approve, pursuant to the CEQA, a "series of actions that can be characterized as one large project." The document is also intended to provide the information necessary under the National Environmental Policy Act (NEPA) to enable the U.S. Army Corps of Engineers (USACE), for example, to authorize a project under the Clean Water Act (CWA), Rivers and Harbors Act, and Marine Protection, Research, and Sanctuaries Act (MPRSA).

1.3 STRUCTURE AND USE OF THE PROGRAM EIR

Any party that constructs oil-drilling platforms on lands leased from the State is required to file an Abandonment Plan that explains how the party will abandon its platforms in a manner that is safe and protects the environment. In 1994-5, the CSLC and other agencies approved Chevron's Abandonment Plan for the 4H Platforms on condition that, upon completion of abandonment, the platform sites would be "trawlable" (i.e., cleared of seafloor obstructions that could snag commercial fishers' trawl nets). Tests conducted after abandonment proved that the shell mounds could not be trawled without snagging.

In 2001, by agreement with the CSLC, Chevron: (1) filed an application with the CSLC to amend its Abandonment Plan to address the requirement that the lease area be trawlable; and (2) did not propose a specific means to accomplish this requirement, but instead specified a range of potential "modifications" to the Plan, from complete removal of the shell mounds to leaving the shell mounds in place, but providing mitigation to all affected fishermen. Accordingly, this Draft Program EIR/EA analyzes seven Program Alternatives, and their component actions, that would, as discussed in Section 1.1, enable a determination of the final disposition of the shell mounds and caissons.

Table 1-1 (Alternatives Matrix) lists the seven Program Alternatives, including the No Project Alternative (which is equivalent to the NEPA No Action Alternative).

Figure

1-1 Regional Project Location of the Chevron 4H Shell Mound Sites

Figure

1-2 Project Location and Disposal Site Options

Table 1-1. Matrix of Shell Mounds Program Alternatives

PROGRAM ALTERNATIVES	COMPONENT ACTIONS							
	Removal of Materials		*Disposal of Removed Materials*		IN-PLACE MODIFICATION			*Offsite Fisheries Mitigation*
					Level and Spread	*Cap*	*Reef Augmentation*	
	Mounds	Caissons	Mounds	Caissons				
1. Dredge mounds & cut caissons	**Yes**	**Yes**	**Yes**	**Yes**	**No**	**No**	**No**	**No**
2. Level/spread mounds & cut caissons	No	**Yes**	No	**Yes**	**Yes** (shell mounds)	No	No	No
3. Cap mounds & caissons	No	No	No	No	No	**Yes**	No	No
4. Build reefs over mounds & caissons	No	No	No	No	No	No	**Yes**	**Possible**
5. Build reef at Hazel site after (a) dredging or	**Yes**	No	**Yes**	No	No	No	**Yes** (caissons only)	No
(b) leveling/spreading all four mounds	No	No	No	No	**Yes** (shell mounds)	No	**Yes** (caissons only)	No
6. Provide offsite mitigation	No	No	No	No	No	No	No	**Yes**
7. No Project Alternative	No	No	No	No	No	No	No	No

Program Alternatives:

1. Dredging of the shell mound materials and removal of the caissons with transport of the materials and caissons to one or more approved sites for disposal (e.g., at the LA-2 ocean disposal site offshore San Pedro [see Figure 1-2] and/or onshore).
2. In-place leveling of the shell mounds by spreading the materials over the sea floor, with removal, transport, and disposal of the Hazel caissons.
3. In-place capping of all shell mounds and the Hazel caissons.
4. In-place augmentation of all shell mounds and the Hazel caissons as artificial reefs.
5. Augmentation of the Hazel caissons (as an alternative to removing the caissons) with an artificial reef after elimination of all shell mounds by:
    a. Dredging; or
    b. Leveling and spreading.
6. Leaving the shell mounds and caissons in-place with provision for offsite fisheries mitigation.
7. The “No Project” Alternative (required pursuant to the State CEQA Guidelines section 15126.6(e)).

As shown in Table 1-1, each Program Alternative, except the No Project Alternative, consists of one or more of the following component actions:

- Removal of shell mounds materials at one or more platform locations;
- Removal of remaining Platform Hazel caissons;
- Disposal of removed materials;
- In-place modification options;
  - Level and spread the shell mounds materials;
  - Cap the mounds and caissons with clean sediments;
  - Augment the mounds and caissons as artificial reefs;
- Offsite mitigation of fishing impacts.

As discussed above, it is expected that the Program that is ultimately selected will apply actions drawn from one or more of these Program Alternatives, and that the analysis of this Program EIR/EA encompasses the range of impacts that could result from each Program Alternative, singly or in combination with others.

All of the Program Alternatives listed in Table 1-1 are analyzed to an equivalent level of detail to allow permitting agencies to determine whether or not a Program Alternative, or any combination of Program Alternatives or their component actions, can be implemented. During the public review of the Draft Program EIR/EA, the public and affected agencies will have the opportunity to comment on the adequacy of the analysis of the Program Alternatives and their component action(s).

Based on the information presented in this Draft Program EIR/EA, and concurrent with the preparation of a Final Program EIR/EA that addresses agency and public comments, Chevron will amend its application to the CSLC to designate a proposed Program for implementation that meets the Program objectives. Chevron's proposed Program may be composed of: (1) one of the Program Alternatives evaluated in the Draft Program EIR/EA (other than the No Project Alternative); or (2) a combination of the component actions addressed in the Draft Program EIR/EA.

Following completion of the Final Program EIR/EA, the CSLC staff will recommend a Program for the Commission's consideration that staff believes: (1) best meets the Program objectives; and (2) can be permitted by all applicable agencies. The Commission must ensure that all synergistic or cumulative impacts of the proposed Program have been evaluated in the Final Program EIR/EA. Should the Commission adopt a Program Alternative that has a Class I impact (defined as a significant adverse impact that cannot be mitigated to a level of insignificance; see Introduction to Section 3.0 for definitions of impact classes), the Commission would need to adopt a Statement of Overriding Considerations for that impact.

Following certification of the Program EIR/EA and approval of the proposed Program by the CSLC, Chevron will submit applications to other State, federal, and local agencies

with regulatory authorities covering Program implementation. During the implementation of the proposed Program, it is possible that actions included in the proposed Program may need to be modified, or new actions proposed. In that case, the procedures set forth in the State CEQA Guidelines section 15168(c) will be used to examine these subsequent actions in light of the Program EIR/EA to determine whether additional environmental documentation may need to be prepared pursuant to the State CEQA Guidelines sections 15162 (Subsequent EIRs and Negative Declarations) or 15163 (Supplement to an EIR).

1.4 PROGRAM HISTORY, SETTING, AND BACKGROUND INFORMATION

Production of oil and gas reserves by Chevron within State Leases PRC 1824 and PRC 3150 (in the eastern part of the Santa Barbara Channel offshore Santa Barbara County) began in 1958 with the installation of Platform Hazel. Construction of Platform Hilda was completed in 1960, followed by Platforms Hope and Heidi in 1965. Hazel and Hilda were installed approximately 1.5 nautical miles (nm) offshore Summerland at water depths of 96 feet (29 meters [m]) and 106 feet (32 m) respectively; Hope and Heidi were located approximately 2.6 and 2.5 nm offshore the city of Carpinteria, and about 3 nm southeast of Hazel, at water depths of 137 feet (42 m) and 126 feet (38 m), respectively. Oil and gas produced from the 4H Platforms were transported through subsea pipelines to Chevron's onshore processing facility in Carpinteria (now owned and operated by Venoco, Inc.).

Prior to the 1969-1976 State moratorium on drilling, drilling muds and cuttings were discharged from and accumulated beneath the platforms. From 1976 until drilling ceased, drilling muds and cuttings were collected at the platforms, transported in bins to shore, and hauled away to a disposal site (pers. comm., K.M. Light, Chevron). All of the wells on the 4H Platforms were shut-in prior to September 1992. In 1994-5, the CSLC and the California Coastal Commission (CCC) approved the decommissioning of all four platforms following adoption of a Mitigated Negative Declaration (MND No. 652, CSLC 1994) and coastal development permit (CDP) E-94-006 respectively. In 1996, Chevron removed most of the platform structures except for the four Platform Hazel caissons.[2]

While they stood, the 4H Platforms provided a substrate for mussels, other sessile (permanently attached) invertebrates, and algae, and supported associated fishes and mobile invertebrates (Page and Dugan 1999; Holbrook et al. 2000). The biotic community of the platforms produced a steady rain of shells and organic matter that, along with the in situ drilling muds and cuttings and naturally deposited sediments, formed roughly semi-circular "shell mounds" under each of the four platforms. These mounds are, as noted in Section 1.1, approximately 25 to 28 feet (7.6 to 8.5 m) in

2 Platforms Hope, Heidi and Hilda had similar structural configurations with two large, hollow and water-filled caisson legs each. In 1996, these legs were cut and dewatered until they achieved moderate positive buoyancy, then pulled free from the bottom. In contrast, Platform Hazel had cement-filled caisson bases that weighed approximately 2,000 tons each and were covered by the existing mudline (consisting of the shell mound) at the time; the platform's legs were cut to one foot below the mudline, and the grouted caisson bases were left buried to minimize bottom disturbance.

height, with diameters ranging from 180 to 266 feet (55 to 81 m). A total volume of approximately 45,000 cy (34,405 m^3) of material is contained in all four mounds.

Figure 1-3 shows the four shell mounds as they appeared in December 1999, using color-enhanced imaging of multi-beam bathymetry (from Fugro Inc.). The Figure shows large depressions where the legs of Platforms Heidi, Hilda, and Hope were removed (in contrast to the Hazel shell mound, which contains the remnant caissons) and additional pockmarks and scarring.

Appendix A shows the bathymetry of each shell mound and the surrounding seafloor, the sites where core samples were taken, and the locations of several pipelines and power cables, now abandoned in place, that were associated with the 4H Platforms. Figure A-3 also shows two active pipelines, located approximately 200 to 400 feet (61 to 122 m) east of the Hope shell mound, which transport oil and gas from Platform Grace in federal waters to Venoco's processing facility in Carpinteria.

The 4H Platform Decommissioning Project approved by the CSLC and CCC included a requirement that the platform sites, after platform removal and with the shell mounds left in place as analyzed in the MND (CSLC 1994), be "trawlable" (as was the case before the platforms were installed). The CCC's CDP E-94-006, Condition 7, states in part:

> Prior to Chevron's quitclaim or assignment of leases PRC 1824 and PRC 3150, Chevron shall submit to the Executive Director and the SLC an analysis, to include supporting information, of whether or not debris identified in the above surveys and attributed to Chevron shall be removed. If the Executive Director determines that removal of the debris attributed to Chevron is necessary to avoid an unreasonable risk of snagging by trawl nets, this matter shall be set for public hearing before the Commission for the purpose of determining whether or not this coastal development permit shall be amended to require debris removal.

The CCC made the following additional finding on July 6, 2001:

> The Commission hereby determines that Special Condition 7 of the coastal development permit E-94-006 requires Chevron to apply forthwith for an amendment to remove the four shell mounds located at the former sites of Platforms Hazel, Heidi, Hilda and Hope.

Pursuant to this requirement, Chevron's application (Chevron Environmental Management Co. 2001) to amend its CDP E-94-006 states that:

> Chevron agrees to remove the four shell mounds located at the former sites of Platforms Hazel, Heidi, Hilda, and Hope if determined appropriate by the agencies with jurisdiction following consideration of the results of the CEQA/NEPA environmental review, including project alternatives, and determination of (1) feasibility of shell mound removal, and (2) whether the benefits of shell mound removal outweigh any adverse impacts of the removal operation.

Figure (color)

1-3 Bathymetry of the Shell Mounds Sites (1999)

color page 2

In compliance with agency requirements, Chevron conducted post-removal surveys of the lease areas, removed debris dropped during platform removal operations, and conducted trawl tests to determine if any debris remained in the lease area that could snag commercial fishers' trawl nets. The trawl tests determined that commercial trawl gear could not cross the shell mounds without snagging. Chevron subsequently removed additional debris, installed and maintained marker buoys at each of the shell mound sites, and provided navigational equipment to commercial trawlers to enable trawlers to avoid possible damage to their gear.

1.5 CHARACTERIZATION OF THE SHELL MOUNDS

Physical and biological characterization of the shell mounds was undertaken in 1998-2003. This work included high-resolution bathymetric surveys of the mounds conducted by Fugro, Inc. (see Appendix A), a biological habitat characterization study (de Wit 1999), and a more comprehensive follow-up study (de Wit 2001). The latter study had the following objectives: collect and analyze data on the physical, chemical, and biological characteristics of the shell mounds; identify feasible[3] methods of removing the features; and assess potential impacts to various resources from shell mound removal and from their continued existence in-place. The de Wit (2001) report (available at www.slc.ca.gov/Reports/Reports.htm) supported the following conclusions:

- With the exception of caisson structures remaining at the Platform Hazel site, the shell mounds at all four sites have similar physical characteristics comprising three distinct strata: an upper layer of shells, an intermediate layer of drill muds and cuttings, and an underlying layer of "native" seafloor sediments.
- An oily sheen and petroleum odor were present in several layers of muds and cuttings in all shell mounds.
- Sediment test results indicated elevated concentrations of selected contaminants and, based on bioassay tests of sediment elutriates (aqueous extracts), the potential for acute toxicity to marine organisms.
- Shell mound-associated biota appeared to have decreased in species richness and abundance since removal of the platforms. The shell mounds in their current form (absent the platform structures) provide limited biological habitat value.
- It is feasible to remove the shell mounds by using a clamshell bucket dredge or by trawling using a gorilla-type net or dragline dredge.
- Capping of the mounds could, in theory, isolate the contaminated material.
- Neither commercial nor recreational fishers would be expected to benefit from the continued existence of the shell mounds in their present condition.

3 "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors (State CEQA Guidelines section 15364).

Bomkamp et al. (2001) conducted studies to determine if the densities, sizes, or growth rates of fishes and macroinvertebrates on the 4H shell mounds differed from those of similar species on natural soft bottom habitat and on similar shell mounds under existing platforms in the vicinity. They found that although the 4H shell mounds supported some hard-bottom species, densities, sizes, and inferred growth rates were generally lower than on sites with platforms. In addition, community composition on the shell mounds was dominated by scavengers and deposit feeders, versus a greater abundance of predatory species at the existing platform sites. Reduced biological productivity of the shell mounds was attributed to the removal of the overlying platforms. Chevron also commissioned a study by MEC to investigate the potential for contaminants to accumulate in organisms that occur on the shell mounds. The results of that study (MEC 2002), which did not find significantly elevated contaminant concentrations in the tissues of crabs, fishes, and sea cucumbers collected on the shell mounds, have been considered in the preparation of this Program EIR/EA.

In 2002, the CSLC directed additional investigation of the physical and chemical properties of the shell mounds in order to identify appropriate alternatives for any final disposition of the shell mounds. This analysis was done consistent with the requirements of the USACE and the U.S. Environmental Protection Agency (USEPA) because these agencies regulate the disposal of dredged sediment in the ocean and have developed a tiered program for assessing the suitability of sediment for open water disposal.[4] In April 2002, the CSLC, CCC, USACE, USEPA, and Central Coast Regional Water Quality Control Board (RWQCB) approved a Sampling and Analysis Plan (SAP) prepared by SAIC and AMEC (AMEC 2002a). The SAP provides sampling and analytical procedures that are based on the USEPA/USACE procedures and that meet requirements of the RWQCB and the State's Water Quality Control Plan for Ocean Waters of California (California Ocean Plan). The approved SAP included:

- vibracore collection of sediment cores from four locations on each of the four shell mounds (see Appendix A), with the sediment cores from each mound subdivided into three strata and composited for analytical purposes;[5]
- comparison with a sample from the LA-2 ocean disposal site reference location as required for consideration of disposal at LA-2; and

4 The tiered approach (using bioassay, bioaccumulation, and analytical chemistry tests) is detailed in the guidance document titled *Evaluation of Dredged Material Proposed for Ocean Disposal,* commonly referred to as the *Green Book* (EPA-503/8-91/001, 1991; www.epa.gov/owow/oceans/gbook/). In addition to the Green Book, USEPA Region 9 (1991) has developed regional guidance in its *General Requirements for Sediment Testing of Dredged Material Proposed for Ocean Dumping*.

5 Vibracoring is a sediment sampling methodology for retrieving continuous, undisturbed cores. A high frequency, low amplitude vibration is transferred from the vibracore head down through an attached barrel or core tube. This vibrational energy liquefies sediments, enabling the core barrel attached to the vibracore unit to penetrate into the liquefied sediments. A core catcher, attached to the end of the barrel, holds the sediment inside the barrel when withdrawn from the sediments.

- standardized analyses of sediment chemistry for all contaminants of concern, toxicity, and bioaccumulation.

Vibracore sampling of the mounds was conducted in May 2002. In August 2002, AMEC (2002b) completed a draft final report on the analytical results; the CSLC distributed this draft report to regulatory agencies and other interested parties for comment prior to its finalization and the incorporation of methods and results into this Program EIR/EA (Appendix C). Section 3.2 provides additional discussion of the results.

Finally, during February through April, 2003, SAIC investigated the possibility of contaminants leaching from the shell mounds into the surrounding water column using filter-feeding organisms (mussels) tethered to the mounds for at least 8 weeks, plus "control" animals tethered off of the mounds at reference sites, and subsequently collected for tissue analyses. Mechanical semi-permeable membrane devices were also deployed to provide additional estimates of contaminants in the water column. This study also included analyses of surficial sediment quality in the vicinity of the shell mounds to evaluate the similarities in the chemical and physical characteristics of the adjacent bottom sediments with those of the shell mound materials. Temperature and current meters were also deployed during the study. Key findings, which are discussed in more detail in Section 3.2, are described below.

- Contaminant bioaccumulation at the shell mound sites did not show a statistically significant difference when compared to bioaccumulation at the reference sites.
- Survival and growth of caged mussels at the shell mounds was comparable to or greater than at reference sites.
- There was no evidence of contaminant leaching or toxicity/stress from the mounds.
- Sediment texture and chemical characteristics differ in several respects between shell mounds and adjacent bottom sediments.
- Sediments adjacent to shell mounds contain drilling wastes related to the shell mounds, including barium and PCBs, which will likely persist in the environment.
- Bottom currents flowed predominantly in a westerly direction, at maximum velocities of 29-35 cm/sec during the study.

Tables 1-2 and 1-3 summarize the above-described surveys and shell mounds strata.

Table 1-2. Summary of Shell Mound Surveys

Survey/Plan	*Survey Description*
de Wit (1999)	Biological habitat characterization study using video and still photography from a remotely operated vehicle (ROV), along with diver observations and collection of macroinvertebrates.
de Wit (2001)	Biological data collected by ROV video and still cameras, physical and chemical characteristics assessed from the analyses of cores taken at several locations on each shell mound, and impact assessment based on the characteristics of feasible removal methods and on the results of the laboratory analyses of the site-specific data.

Table 1-2. Summary of Shell Mound Surveys (continued)

Survey/Plan	*Survey Description*
Fugro, Inc. (2002)	High-resolution bathymetric surveys of the shell mounds.
MEC (2002)	Chevron-commissioned investigation of the potential for contaminants to accumulate in organisms that occur on the shell mounds.
AMEC (2002b)	Vibracore collection of sediment cores from four locations on each of the four shell mounds, with the sediment cores from each mound subdivided into three strata and composited for analytical purposes; comparison with a sample from the LA-2 ocean disposal site reference location; and standardized analyses of sediment chemistry for all contaminants of concern, toxicity, and bioaccumulation.
Bomkamp et al. (2001)	Evaluation of densities and sizes/growth rates of macroinvertebrates and fishes found on shell mounds versus natural soft bottom and under active platforms.
SAIC (2003)	Placement of caged mussels and semipermeable membrane devices in replicate groupings at each of the four shell mounds and at offsite "control" locations for a two-month period to assess contaminant leaching from the shell mounds into the surrounding waters; vibracore sampling of sediments surrounding the shell mounds for comparison with shell mound physical and chemical properties; and deployment of current meters to measure the direction and strength of currents.

Table 1-3. Summary of Shell Mound Strata

Strata	*Subdivision*	*General Description*	*Stratum Thickness in Vibracore in feet (m)*
1) Shell Hash	1a: Primarily shells with minor amounts of clay. 1b: Approximately equal mixture of shells and clay.	Mussel, clam, and barnacle shells up to several inches in diameter with variable amounts of black clay infilling.	1 to 7 (0.3 to 2.1)
2) Drill Cuttings	2a through 2e (as necessary) subdivided into distinct pockets of cuttings.	Inter-layered sandy lean [(1)] to fat [(2)] clay (CL/CH), and clayey to silty sand (SC/SM) with variable amounts of gravel-size siltstone rock fragments, with pockets of oil sheen/petroleum odor.	0 to 18 (0 to 5.5)
3) Sea Floor Sediments	Fairly uniform clay, no subdivisions.	Lean to fat clay (CL/CH), olive gray, medium stiff to stiff, with small shell fragments.	0 to >10 (0 to >3.1)
Source: de Wit 2001. [(1)] Lean = low plasticity [(2)] Fat = high plasticity			

1.6 SCOPE OF PROCESS AND CONTENT OF PROGRAM EIR/EA

Consistent with the requirements of State CEQA Guidelines section 15002(a), the environmental review process is intended to:

- inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities;

- identify ways that environmental damage can be avoided or significantly reduced;
- prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible;
- disclose to the public the reasons why an agency approved the project in the manner the agency chose if significant environmental effects are involved; and
- enhance public participation and foster interagency coordination in the review of proposed projects.

1.6.1 Notice of Preparation, Scoping, Public Workshop, and Consultation

1.6.1.1 Notice of Preparation and Scoping

On June 3, 2002, the CSLC filed an Initial Study/Notice of Preparation (NOP) with the State Clearinghouse (SCH No. 2002061002), and sent the NOP to federal, State, and local agencies and to interested parties. The NOP provided background on the history of the shell mounds, information on their physical, chemical, and biological properties, a discussion of various options to be examined for final disposition of the shell mounds, and a preliminary evaluation of potentially significant impacts and issues to be addressed. On June 17, 2002, a public Scoping Meeting was held in Santa Barbara to provide an opportunity for agency staffs and the public to comment on the NOP and related matters pertaining to the shell mounds.

The CSLC received oral and/or written comments from the following agencies and interested parties:

- ChevronTexaco, Inc.
- Environmental Defense Center
- League of Women Voters
- Local Ocean Network
- Office of State Senator Jack O'Connell
- Santa Barbara County Air Pollution Control District
- Southern California Association of Governments
- Southern California Trawlers Association
- United Anglers of Southern California
- Ventura County Air Pollution Control District

A transcript of the scoping meeting and copies of all letters are on file with the CSLC. Appendix B provides an index of the comments and sections of this Program EIR/EA where they are addressed.

1.6.1.2 June 2003 Public Workshop and July 2003 CDFG Consultation

On June 26, 2003, a public agency/stakeholder workshop was held in Santa Barbara following the release of data from a draft report on the Mussel Study completed earlier in the year (see Section 1.5). The purpose of the workshop was: (1) to present the methods and results of the Mussel Study, and (2) to describe the approach to this Program EIR/EA. Thirty-eight people attended the workshop representing a variety of agency, industry, fishing, environmental, and academic entities and the general public. Following the workshop, the California Department of Fish and Game (CDFG) Marine Division staff requested additional agency consultation with the CSLC pursuant to CEQA section 21080.4(b). This latter meeting was held on July 29, 2003. Comments received during these meetings have been incorporated into applicable sections/analyses of this Program EIR/EA.

1.6.2 Document Organization

Based on review of the previously assembled information, and consideration of the comments received on the NOP, this Program EIR/EA considers: 1) five Program Alternatives to remove or modify the shell mounds, 2) one Program Alternative that would leave the mounds in place but mitigate their impacts, and 3) the No Project Alternative (see Section 1.2). These Program Alternatives for final disposition of the 4H shell mounds, and their component actions, are described in detail in Section 2. The alternatives discussion, included in Section 2, is prepared in accordance with State CEQA Guidelines section 15126.6, and provides information to support the USACE's comparison of alternatives under CWA section 404(b)(1).

Section 3 addresses the resources and issue areas for which potentially significant impacts have been identified, which include the following:

- Air Quality
- Marine Water Quality and Sediment Quality
- Marine Biological Resources
- Commercial and Recreational Fishing
- Other issues that may be significant at onshore transfer and disposal sites, including recreation, marine and land transportation, noise, hazards, environmental justice, and land use and related issues.

Section 3 also recommends mitigation measures, where possible, that would reduce or eliminate significant adverse effects. Pursuant to PRC section 21081.6, a Mitigation Monitoring Program (MMP) applicable to each of the Program Alternatives, and/or a recommended Program, has been developed to ensure the implementation of the recommended mitigation measures. The MMP is provided in Section 8.

1.6.3 Agency Roles and Responsibilities

The State CEQA Guidelines define "lead," "responsible," and "trustee" agencies. The CSLC, as lessor of the State lands on which the shell mounds lie, has the principal responsibility for carrying out and approving any modifications to the shell mounds. Therefore, the CSLC is the lead agency. Responsible agencies under the CEQA are defined as State public agencies that have discretionary authority over certain aspects of the project. These agencies may use this Program EIR/EA in their decision-making processes. Responsible agencies for the project are the CCC and the RWQCBs (Central Coast and Los Angeles Regions). Trustee agencies are agencies that have jurisdiction, by law, over the natural resources affected by a project. Based upon this definition, the California Department of Fish and Game (CDFG) and the local Air Pollution Control Districts (APCDs) are trustee agencies.

The federal NEPA counterparts to the State agencies are the lead and cooperating agencies, and the agencies with jurisdiction by law over resources affected by the project. The USACE would have primary responsibility for the issuance of a permit for any actions to remove or modify the shell mounds. The USEPA is a NEPA cooperating agency and would have review and approval authority over the USACE's issuance of a permit for the shell mounds removal and disposal, and NEPA compliance. Federal resource agencies are the National Marine Fisheries Service (NOAA Fisheries) and the U.S. Fish and Wildlife Service (USFWS), which have jurisdiction over federally listed threatened and endangered species (both agencies) and marine fisheries resources, marine mammals, and sea turtles (NOAA Fisheries).

Table 1-4 summarizes the agency approvals and permits associated with the various Program Alternatives. Additional information is provided in Sections 2.2 through 2.7.

1.6.4 Program EIR/EA Process

The Draft Program EIR/EA will be circulated for review by public agencies and interested members of the public for a 60-day period, an additional 15 days beyond what the CEQA requires. The CSLC will prepare responses to comments received during this period. The Final Program EIR/EA will be prepared in conformance with State CEQA Guidelines section 15132. As lead agency for the Program EIR/EA, the CSLC is responsible for determining its adequacy pursuant to the CEQA.

The USACE does not formally take action without an application for a proposed action, but will provide input as to the adequacy of the document for federal requirements that would apply to a selected project. Chevron would be responsible for obtaining all permits from the USACE and other applicable federal, State, and local agencies.

Table 1-4. Permit Approvals for Applicable Program Components (page 1 of 6)

Agency	*Statute/ Regulations*	*Regulated Activities*	*Permit/Approval*	*Regulated Program Components*	*Review Period*
FEDERAL AGENCIES					
U.S. Army Corps of Engineers (USACE) Los Angeles District (see footnote 1 on page 1-1)	Clean Water Act § 404 (33 USC 1344)	Discharge of dredged or fill material in waters of the U.S., including the territorial seas, tidelands, rivers, streams and wetlands.	Section 404 permit.	Discharge of dredged material at an ocean disposal site, and discharge of fill material to cap or enhance the mounds as artificial reefs.	3-6 months after a complete permit application to the USACE.
	Marine Protection, Research and Sanctuaries Act § 103 (33 USC 1413)	Transportation of dredged material by vessel or other vehicle for the purpose of dumping it in ocean waters at dumping sites designated under 40 CFR Part 228.	Section 103 permit.	Ocean disposal and transport of dredged shell mound material.	3-6 months after a complete permit application to the USACE; permit review occurs concurrently with the Section 404 permit process.
	Rivers and Harbors Act § 10 (33 USC 403)	Installation of structures or work in navigable waters of the U.S. (i.e., waters subject to the ebb and flow of the tide).	Section 10 permit.	Use of equipment and activities of project personnel in the project area; structures such as artificial reefs.	3-6 months after a complete permit application to the USACE; permit review occurs concurrently with the Section 404/103 permit processes.
NOAA Fisheries	Endangered Species Act (16 USC 1513)	Effects on federally listed species (such as salmon or steelhead), and those proposed for listing; destruction or adverse modification of critical habitats.	Section 7/10 Incidental Take permit.	Dredging, transport of dredged material and ocean disposal; removal of caissons; use of explosives.	3-6 months after a complete permit application. The lead federal agency is responsible for compliance with the ESA, MMPA and EFH requirements and consults directly with NMFS.

Table 1-4. Permit Approvals for Applicable Program Components (page 2 of 6)

Agency	*Statute/ Regulations*	*Regulated Activities*	*Permit/Approval*	*Regulated Program Components*	*Review Period*
FEDERAL AGENCIES (CONTINUED)					
NOAA Fisheries (continued)	Marine Mammal Protection Act (16 USC 1361)	Prohibits "taking" and importation of marine mammals or mammal products.	Research or enhancement permit.	Dredging, transport of dredged material and ocean disposal; removal of caissons; use of explosives.	3-6 months after a complete permit application. The lead federal agency is responsible for compliance with the ESA, MMPA and EFH requirements and consults directly with NMFS.
	Magnuson-Stevens Fishery Conservation and Management Act (16 USC 1801, Public Law 94-265)	Projects work or activities that would affect Essential Fish Habitat (EFH) of managed fish species.	Concurrence on an analysis of effects on EFH.	The Santa Barbara Channel is classified as EFH.	3-6 months after a complete permit application. The lead federal agency is responsible for compliance with the ESA, MMPA and EFH requirements and consults directly with NMFS.
U.S. Coast Guard (USCG)	33 CFR 325.2(a)(9)(iv)	Activities that involve the transportation of dredged material for the purpose of dumping it in ocean waters; transport and use of explosives.	Coordination with the USACE occurs during review of the Section 404/10/103 permit application; permit for transport and use of explosives.	Disposal of dredged material and use of explosives to remove shell mounds and caissons, respectively.	3-6 months after a complete permit application to the USACE; the USACE coordinates directly with the USCG.

Table 1-4. Permit Approvals for Applicable Program Components (page 3 of 6)

Agency	*Statute/ Regulations*	*Regulated Activities*	*Permit/Approval*	*Regulated Program Components*	*Review Period*
FEDERAL AGENCIES (CONTINUED)					
U.S. Environmental Protection Agency (USEPA) Region 9	Clean Water Act § 402 (33 USC 1344)	Direct discharge of material or water that would affect water quality.	National Pollutant Elimination Discharge System (NPDES) permit.	Discharge of decant water that drains from dredged material.	USEPA has delegated NPDES permit authority to the State Water Resources Control Board and various Regional Board(s).
	National Environmental Policy Act-NEPA (42 USC 4321-4347 and 40 CFR 1500-1508)	Federal permit actions (such as the Section 404/10/103 permit) require compliance with NEPA.	Section 404/10/103 permit. Section 401/402 permit. Incidental Take permit.	Removal or modification of the shell mounds and ocean disposal of shell mound material; effects on endangered and managed species, and marine mammals.	USEPA reviews NEPA documents to ensure that the lead agency's analysis of the project complies with NEPA. This review is concurrent with the USACE permit process.
U.S. Fish and Wildlife Service	Endangered Species Act (16 USC 1513)	Effects on federally listed species (such as snowy plover or brown pelican), and those proposed for listing; destruction or adverse modification of critical habitats.	Section 7/10 Incidental Take permit.	Dredging, transport of dredged material and ocean disposal; removal of caissons; use of explosives.	3-6 months after a complete permit application. The lead federal agency is responsible for compliance with the ESA and consults directly with USFWS.

Table 1-4. Permit Approvals for Applicable Program Components (page 4 of 6)

Agency	*Statute/ Regulations*	*Regulated Activities*	*Permit/Approval*	*Regulated Program Components*	*Review Period*
STATE AGENCIES					
California State Lands Commission (the CEQA Lead Agency)	California Environmental Quality Act-CEQA (PRC § 6500 et seq. & 14 CCR 15000-15007)	Any work or activity that meets the definition of a project under the CEQA.	Review of the project for consistency with the CEQA and related laws. Evaluation of the impacts of the project in the area of jurisdiction.	Determination to certify or not certify the CEQA document. and associated Mitigation Monitoring Plan.	6-12 months to prepare the CEQA document. 3-6 months to review permit engineering plans related to project activities.
	PRC § 6101 et seq.	Lease (including a permit, right-of-way, easement, license, compensatory agreement, or other entitlement of use) for use of State lands	Modification of 4H Platform Abandonment Plan (i.e., shell mound-caisson removal/ disposition work plan).	First action following certification of the CEQA document.	Concurrent with preparation of the CEQA document.
California Coastal Commission	California Coastal Act (PRC § 30000 et seq.)	Any development or activity within the Coastal Zone.	Coastal Development Permit	Activities that occur within the California Coastal Zone.	2-6 month review process for the CDP; may be concurrent with the CEQA process.
	Coastal Zone Management Act-CZMA (16 USC 1456)	Federal licensed, permitted, or funded activities affecting land or water uses in the California Coastal Zone.	Determination of consistency with the California Coastal Management Program (CCMP) may be required for federal actions.	Federal licensed, permitted, or funded activities affecting land or water uses in the California Coastal Zone.	3-6 month review process; may be concurrent with the CEQA and CDP processes.

Table 1-4. Permit Approvals for Applicable Program Components (page 5 of 6)

Agency	*Statute/ Regulations*	*Regulated Activities*	*Permit/Approval*	*Regulated Program Components*	*Review Period*
STATE AGENCIES (CONTINUED)					
California Department of Fish and Game (CDFG) Regions 3 and 4 California Department of Fish and Game (CDFG) Regions 5 and 7	California Endangered Species Act (Fish and Game Code § 2050 et seq.)	Any activity that would have adverse effects on state listed threatened or endangered species.	Section 2081 Endangered Species Incidental Take permit.	Dredging and ocean disposal, removal of caissons and any other activity that would affect State-listed species.	1-3 month review process after a complete application and certification of the CEQA document.
	California Artificial Reef Program (Fish and Game Code § 6420 et seq.)	Construction of artificial reefs.	Design and construction of artificial reefs.	Construction of artificial reefs at shell mounds sites.	The USACE coordinates directly with the CDFG on the design of artificial reefs.
Caltrans, District 5	California Vehicle Code § 35780. California Highway Code 117,660-711 21 CCR 14.11.1 to 14.11.6	Transportation of heavy oversized or hazardous loads on state highways and roads.	Transportation permits for large equipment, explosives, and potentially contaminated materials.	Transport of equipment/materials to project area. Transport of dredged material to upland disposal site.	2 months after certification of the CEQA document. Transportation permits are reviewed on day of the application.
Regional Water Quality Control Board Regions 3 and 4	Porter-Cologne Water Quality Control Act (California Water Code Div. 7 13000 et seq.) 22 CCR 66261.24. Clean Water Act §§ 401 & 402 (33 USC 1341 & 1342).	Discharge of materials that would affect receiving water quality or beneficial uses.	Section 401 certification to validate Section 404 permit. Section 402 NPDES permit for discharge of water drained from dredged material. Waste Discharge Requirements (WDR) for disposal of contaminated dredged material in an upland landfill.	Dredging and ocean disposal of potentially contaminated sediment, removal of caissons, discharge of fill to cap or enhance shell mounds as artificial reefs, and any other activity that would affect water quality or beneficial uses. Upland disposal of contaminated dredged material.	3-6 months after a complete application and certification of the CEQA document. The Section 401 and USACE Section 404 processes should occur concurrently. Projects that affect water quality must comply with provisions of Porter-Cologne.

Table 1-4. Permit Approvals for Applicable Program Components (page 6 of 6)

Agency	*Statute/ Regulations*	*Regulated Activities*	*Permit/Approval*	*Regulated Program Components*	*Review Period*
LOCAL AGENCIES					
Santa Barbara County Air Pollution Control District (SBAPCD)	CEQA Clean Air Act (42 USC 7401)	Emissions generated from equipment used during a project.	Authority to Construct Permit.	Review of equipment use and associated emissions calculations.	2 months after certification of the CEQA document.
Ventura County Air Pollution Control District (covers Port Hueneme)	CEQA Clean Air Act (42 USC 7401)	Emissions generated from equipment used during a project.	Authority to Construct Permit.	Emissions calculations for handling and stockpiling dredged material in preparation for upland disposal.	2 months after certification of the CEQA document.
South Coast Air Quality Management District (covers Los Angeles and Long Beach Harbor Areas)	CEQA Clean Air Act (42 USC 7401)	Emissions generated from equipment use on upland areas during staging and upland disposal operations.	Authority to Construct Permit or Authority to Operator.	Emissions calculations for handling and stockpiling dredged material in preparation for upland disposal.	2 months after certification of the CEQA document.
Health Department and Fire Department	Comprehensive Environmental Response Compensation and Liability Act (42 USC 103)	Assuming contaminated materials require offsite disposal, the local agency will require adequate documentation of materials and associated environmental contaminants.	Approval of onshore disposal operations and procedures.	Upland disposal of contaminated dredged materials in a State approved landfill or disposal facility.	1-3 months after certification of the CEQA document.